

SNAP BUCKLE STRUCTURE OF HANGTAG FOR TOOLS

BACKGROUND OF THE INVENTION

The present invention is related to a snap buckle structure of a hangtag for tools, including a base, and a snap engagement member wherein the base has an indented tool cavity disposed at the front side thereof, and an engaging member protruding at both front lateral sides of the lower section thereof respectively. The engaging member is equipped with a stop edge, a retaining rib having an inwardly protruded hooked end, and a pair of reversed L-shaped upper and lower limiting seats extending above and under the retaining rib thereof respectively to form a multiple of equally spaced recesses from top to bottom of the engaging member thereof; whereby, the snap engagement body is transversely guided and securely located onto the engaging member thereof without being blocked by a tool adapted at the indented tool cavity thereof. Besides, a forceps-like tool can be applied to cut off the retaining rib thereof in a smooth manner, detaching the tool from the base for use without being interfered in operation.

Please refer to Fig. 1. A conventional snap buckle structure of a hangtag for tools is mainly made up of a tool 10, and a snap engagement body 20. The base 10 has an indented tool cavity 11 with an opening end 111 disposed at the front side thereof, a through hole 12 disposed at both lateral sides of the lower section thereof respectively, an elastic plate 13 having a hook block 131 attached thereto protruding upwards from the bottom at the inner side of the through hole 12 thereof, and an L-shaped engaging groove 14 defining both

lateral sides of the lower section thereof. The snap engagement body 20 has a pair of engaging plates 21 each having a hook hole 211 disposed thereon extending symmetrically at both lateral sides thereof, and a limiting groove 22 disposed at the middle section thereof. In assembly, the engaging plates 21 are guided from top to bottom and joined to the engaging grooves 14 of the base 10 till the hook blocks 131 of the elastic plates 13 held onto the hook holes 211 of the engaging plates 21 thereof to complete the assembly.

There are some drawbacks to such conventional snap buckle structure of a hangtag for tools. First, in assembly, the snap engagement body 20 led from top to bottom to join at the engaging grooves 14 thereof is easily blocked by a tool 30 adapted at the indented tool cavity 11 of the base 10 therein as shown in Fig. 2. Thus, the snap engagement body 20 can't be easily and quickly assembled onto the base 10 thereof. Second, to take out the tool 30 from the indented tool cavity 11 for use, a forceps-like tool 40 is applied to cut off the elastic plates 13 from the rear side of the base 10 to detach the hook blocks 131 thereof from the hook holes 211 of the snap engagement body 20. Meanwhile, the forceps-like tool 40 opening sideway to cut off the elastic plate 13 from both sides thereof is easily interfered by the outer wall of the indented tool cavity 11 thereof as shown in Fig. 3. Thus, the indented tool cavity 11 thereof often gets in the way of the forceps-like tool 40 in operation.

SUMMARY OF THE PRESENT INVENTION

It is, therefore, the primary purpose of the present invention to provide a snap buckle structure of a hangtag for tools, including a base, and a snap engagement member wherein the base has an indented tool cavity, and an

engaging member protruding at both front lateral sides of the lower section thereof respectively. The snap engagement body is transversely guided to the engaging member of the base with an upper, middle, and lower engaging fingers extending at both lateral sides thereof located sequentially into recesses of the engaging member, and pushed downwards till an inverted hook of the middle engaging finger thereof held onto a hooked end of a retaining rib of the engaging member thereof for secure location thereof so that the snap engagement body thereof will not be blocked by a tool adapted at the indented tool cavity therein, facilitating an easier and faster assembly of the present invention.

It is, therefore, the secondary purpose of the present invention to provide a snap buckle structure of a hangtag for tools wherein, via the inverted hook of the middle engaging finger thereof held onto the hooked end of the retaining rib thereof, a forceps-like tool is easily extended into the recesses defining both upper and lower sides of the retaining rib thereof to cut off the retaining rib thereof in a smooth manner, detaching the inverted hook of the snap engagement body from the hooked end of the engaging member without being interfered in operation to quickly retrieve the tool from the base for use.

BRIEF DESCRIPTION OF THE DRAWINGS

Fig. 1 is a perspective exploded view of a conventional snap buckle structure of a hangtag for tools.

Fig. 2 is a diagram showing a snap engagement body of the conventional snap buckle structure of a hangtag for tools blocked by a tool in assembly.

Fig. 3 is a diagram showing a forceps-like tool opening sideways being interfered by a tool cavity of the conventional snap buckle structure of a hangtag for

tools.

Fig. 4 is a perspective exploded view of the present invention.

Fig. 5 is a sectional view of the present invention in assembly.

Fig. 6 is a diagram showing a retaining rib of the present invention being cut by a forceps-like tool in operation.

DETAILED DESCRIPTION OF THE PREFERRED EMBODIMENTS

Please refer to Fig. 4. The present invention is related to a snap buckle structure of a hangtag for tools, including a base 50, and a snap engagement body 60. The base 50 has an indented tool cavity 51 with an opening end 511 defining the front side thereof, and an engaging member 52 protruding at both front lateral sides of the lower section thereof respectively. The engaging member 52 is made up of a stop edge 521 extending outwards at the top thereof, a retaining rib 522 with an inwardly protruded hooked end 5221 disposed at the middle section thereof, and a pair of reversed L-shaped upper and lower limiting seats 523, 524 extending equidistantly above and under the retaining rib 522 thereof respectively with the lower limiting seat 524 thereof cut on the same plane as the bottom of the base 50. Thus, a multiple of equally spaced recesses 525 are formed from top to bottom of the engaging member 52 thereof. The snap engagement body 60 includes a limiting groove 61 defining the middle section thereof, an upper and a lower engaging fingers 62, 63 protruding symmetrically at both lateral sides thereof respectively, and a middle engaging finger 64 with an outwardly protruded inverted hook 641 disposed thereon extending at the upper and lower engaging fingers 62, 63 there-between.

Please refer to Fig. 5. In assembly, a tool 30 is adapted at the indented

tool cavity 51 of the base 50 therein with the handle of the tool 30 extending downwards at the opening end 511 thereof. The upper engaging finger 62 of the snap engagement body 60, guided to the stop edge 521 of the engaging member 52 thereof and transversely located into the recess 525 defined by the stop edge 521 and the upper limiting seat 523 thereof, is pushed downwards till the inverted hook 641 of the middle engaging finger 64 held onto the hooked end 5221 of the retaining rib 522 thereof, and the upper and lower engaging fingers 62, 63 thereof adapted at the reversed L-shaped upper and lower limiting seats 523, 524 therein respectively for abutting location. Thus, the tool 30 is securely located at the limiting groove 61 of the snap engagement body 60 therein to complete the assembly of the present invention.

Please refer to Fig. 6. To take out the tool 30 in practical use, a forceps-like tool is applied to cut off the retaining rib 52 thereof so as to detach the tool 30 from the base 50 for use. With the middle engaging finger 64 of the snap engagement body 60 held at the retaining rib 522 of the engaging member 52 therein, the forceps-like tool is easily extended into the recesses 525 defining both upper and lower sides of the retaining rib 522 thereof to cut off the retaining rib 522 thereof in a smooth manner, detaching the inverted hook 641 of the snap engagement body 60 from the hooked end 5221 of the engaging member 52 without being interfered in operation. Thus, the tool 30 is easily and quickly retrieved from the base 50 for use.